



Material Safety Data Sheet

May be used to comply with
 OSHA's Hazard Communication Standard 29 CFR 1910.1200.
 This standard must be consulted for specific requirements.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name :	Type X Grease	Drawing Number:	58-97-5000
Product Numbers:	49-08-5000	Issue Date:	January 2008
		Supersedes Date:	July 2004
Milwaukee Electric Tool Corporation		Company Phone Number:	262-781-3600 or 1-800-729-3878
13135 West Lisbon Road		Emergency Contact Number:	1-800-424-9300
Brookfield, Wisconsin 53005		(United States Only)	(Chemtrec)
www.milwaukeetool.com			

EMERGENCY OVERVIEW

- This product is a semi-solid that is insoluble in water.
- Direct eye contact may cause minor, short term irritation.
- Short term skin exposure is not expected to be irritating.
- Inhalation of oil mist or vapors from material at high temperatures may irritate respiratory passages.
- Ingestion may cause gastro-intestinal irritation.

HMIS Rating:	Health – 1	Flammability – 1	Reactivity – 0	PPE – X C,D	
Hazard Ratings:	0 = Minimum Hazard	1 = Slight Hazard	2 = Moderate Hazard	3 = Serious Hazard	4 = Severe Hazard
A = Goggles	B = Goggles & Gloves	C = Face Shield, Gloves & Apron	X = Special, See Sections 7, 8		

SECTION 2: COMPONENT DATA

Components listed in this section may contribute to the potential hazards associated with exposure to the concentrate. The product may contain additional non-hazardous or trade-secret components.

INGREDIENT	% by Weight	OSHA Reg. Y/N	CAS #	OSHA PEL	ACGIH TLV	California Prop 65 Reg. Y/N	NIOSH REL	IARC/NTP Y/N
Oil Mist	N/A	N/A	Proprietary	5mg/m ³ TWA	5mg/m ³		5 mg/m ³ TWA	N/A
							10 mg/m ³ STEL	
							NIOSH 2500 mg/m ³ idh	

IARC, NTP, and OSHA do not list this product or its ingredients as carcinogens.

SECTION 3: HAZARDOUS IDENTIFICATION

POTENTIAL HEALTH EFFECTS and SYMPTOMS from SHORT TERM/ACUTE EXPOSURE

- **EYE EXPOSURE**

This product is not expected to cause eye irritation under normal conditions of use. Symptoms of slight eye irritation may result when direct contact occurs, or when exposed to high mist levels in poorly ventilated areas.

- **SKIN EXPOSURE**

Short term skin contact is not expected to cause skin irritation. Prolonged or repeated direct exposure to the skin may result in symptoms of irritation.

- **INHALATION:**

This product has low volatility and so is not expected to cause respiratory tract irritation during normal conditions of use. Exposure to oil mist levels and vapors at high temperatures may cause irritation to the respiratory passages.

- **INGESTION**

Ingestion may cause gastro-intestinal irritation.

POTENTIAL CHRONIC HEALTH EFFECTS:

No further data known.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

No further data known.

CARCINOGENICITY:

This product is not listed as a known or suspected carcinogen by IARC, OSHA, or the NTP.

SECTION 4: FIRST AID MEASURES

EYE CONTACT:

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. If the symptoms persist, contact a physician.

SKIN CONTACT:

Remove product from the skin by washing with a mild soap and water. Contaminated clothing should be removed to prevent prolonged exposure. If product is injected under the skin, seek treatment immediately. If symptoms of exposure persist, contact a physician.

INHALATION:

If signs or symptoms of overexposure occur, remove the employee to fresh air. If not breathing, qualified personnel should administer artificial respiration. Seek medical attention. If breathing is difficult, administer oxygen.

INGESTION:

If ingested obtain immediate medical attention. Do not induce vomiting without medical supervision. If vomiting occurs spontaneously, keep airway clear.

SECTION 5: FIRE FIGHTING MEASURES

FIRE AND EXPLOSIVE PROPERTIES:

Flashpoint.....	<400° F (204°C)
Flammability Limits	LEL N/A
	UEL N/A

EXTINGUISHING MEDIA:

In accordance with NFPA guidance, dry chemical, foam or CO2 fire extinguishers are all acceptable. Note that while water fog extinguishers are also acceptable, do NOT apply a direct stream of water onto burning product because it may cause spreading and increase fire intensity.

UNUSUAL FIRE & EXPLOSION HAZARDS:

No further data known.

FIRE-FIGHTING PROCEDURES AND EQUIPMENT:

Emergency responders in the danger area should wear bunker gear and self-contained breathing apparatus for fires beyond the incipient stage. See Section 8 of the MSDS for other PPE to be worn as conditions warrant. Do not let firefighting water runoff enter a sewer.

SECTION 6: ACCIDENTAL RELEASE MEASURES

CLEAN-UP MEASURES:

Important: As with any spill or lead, before responding ensure that you are familiar with the potential hazards and recommendations of the MSDS. Appropriate personal protective equipment must be worn. See Section 8 of this MSDS for PPE recommendations.

If possible, safely contain the spill with dikes or other spill response equipment appropriate for petroleum or organic material releases. Take measures to prevent spreading of product. Note that while product will ignite it will not readily burn. However, as a precaution eliminate ignition sources. Prevent from entering sewers and waterways. Large volumes may be transferred to an appropriate container for proper disposal. Small volumes of residues may be soaked up with absorbents. Spill response materials should be collected for proper disposal.

SECTION 7: HANDLING AND STORAGE

HANDLING:

Wash thoroughly after using, particularly before eating or smoking. Do not eat, drink or smoke in handling area. Avoid contamination of cigarettes or other tobacco products. Launder contaminated clothing prior to reuse.

Users should be alert to the possibility that very small percentages of the population may display unexpected allergic reactions to otherwise innocuous lubricants and raw materials.

As with any industrial chemical, handle the product in a manner that minimizes exposure to practicable levels. Prior to handling, consult Section 8 of this MSDS to evaluate personal protective equipment needs.

Open containers slowly to relieve any pressure. Follow all other standard industrial hygiene practices.

Empty containers may contain product residue. All safety precautions taken when handling this product should also be taken when handling empty drums and containers. Keep containers closed when not in use. Store away from the incompatible materials. Do not store in open or unlabelled containers.

Product residue in empty containers is combustible but will not readily burn. NOTE however, that excessive heating or cutting of empty containers may create an ignition source sufficient to start a fire and in extreme cases, cause an explosion.

STORAGE:

Protect product quality by storing indoors and away from extreme temperatures. Close all containers when not in use.

SPECIAL COMMENTS:

No further data known.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal Protective Equipment:

Selection of personal protective equipment should be based upon the anticipated exposure and made in accordance with OSHA's Personal Protective Equipment Standard found in 29 CFR 1910 Subpart I. The following information may be used to assist in PPE selection.

Eye Protection:

Wear eye protection appropriate to prevent eye exposure. Where splashing is not likely, chemical safety glasses with side shields are recommended. Where splashing may occur, chemical goggles or full face shield is recommended. Eye wash facility should be in close proximity. Emergency shower should be in close proximity,

Footwear/Type:

Safety shoes per local regulations.

Clothing Type:

Wear adequate protective clothes.

Skin Protection:

Gloves are not normally needed during normal conditions of use. If health effects are experienced, oil or chemical resistant gloves such as butyl or nitrile are recommended.

Where splashing or soaking is likely, wear oil or chemical resistant clothing to prevent exposure.

Respiratory Protection:

None required under normal use. A respirator may be worn to reduce exposure to vapors, dust, or mist. Select a NIOSH/MSHA approved respirator appropriate for the type and physical character of the airborne material. A self-contained breathing apparatus is recommended in all situations where airborne contaminant concentration has not been confirmed to be below safe levels. Respirator use should comply with the OSHA Respirator Protection.

Engineering Controls:

Normal general ventilation is expected to be adequate. It is recommended that ventilation be designed in all instances to maintain airborne concentrations at lowest practicable levels. Ventilation should at a minimum, prevent airborne concentrations from exceeding any exposure limits listed in Section 2 of this MSDS.

The user may wish to refer to 29 CFR 1910.1000 (d) (2) and the ACGIH "Threshold Limit Values for Chemical substances and Physical Agents Biological Expert Indices" (Appendix C) for the determination of exposure limits of mixtures. An industrial hygienist or similar professional may be consulted to confirm that the calculated exposure limits apply.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical Appearance	Clear to light yellow, smooth grease
Odor	Mild Petroleum
Physical State	Semi Solid
Water Solubility.....	Insoluble
Specific Gravity @ 20 °C....	(water = 1, @ 4°C) 0.91 @ 25°C
Vapor Denisty.....	N/A
Evaporation Rate (butyl acetate)	N/A
Boiling Point (°C).....	Not volatile
Freezing Point (°C).....	Non-melting
pH.....	N/A
Coefficient of water/oil dist...	N/A

SECTION 10: STABILITY AND REACTIVITY

INCOMPATIBILITIES:

This product is incompatible with strong oxidizing agents.

DECOMPOSITION PRODUCTS MAY INCLUDE:

Thermal decomposition products are dependent on combustion conditions. A complex mixture of airborne solid, liquid, particulates and gasses may evolve when the material burns. Combustion by-products may include:

carbon monoxide (CO)
traces of other toxic fumes.

CONDITIONS TO AVOID:

Avoid contact with incompatible materials and exposure to extreme temperatures.

POLYMERIZATION:

This product is not expected to polymerize.

STABILITY:

This product is stable under normal conditions.

SECTION 11: TOXICOLOGY INFORMATION

Sensitization to product:	Not available.
Reproductive effects:	Not available.
Teratogenicity:	Not available.
Mutagenicity:	Not available.
Syngertistic Materials:	Not available.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: No data at this time.

ENVIRONMENTAL FATE: No data at this time.

SECTION 13: DISPOSAL CONSIDERATIONS:

WASTE DISPOSAL:

Ensure that collection, transport, treatment, and disposal of waste product, containers and rinsate complies with all applicable laws and regulations. Note that use, mixture, processing, or contamination of the product may cause the material to be classified as a hazardous waste. It is the responsibility of the product user or owner to determine at the time of disposal, whether the product is regulated as a hazardous waste.

SECTION 14: TRANSPORTATION INFORMATION

DOT HAZARDOUS MATERIAL INFORMATION:

* Not otherwise DOT regulated.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS:

SARA hazard categories sections 311/312	Immediate (Acute) Health Hazard: No Delayed (Chronic) Health Hazard: No. Fire Hazard: No Sudden Release of Pressure: No. Reactive: No.
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SARA Section 313 Not regulated.

TSCA inventory: All components of this product are listed on the TSCA inventory.

STATE REGULATIONS:

This product contains mineral oil, and as used, may be regulated by the state used oil regulations. Check with the appropriate state agency to determine whether such a regulation exists.

SECTION 16: OTHER INFORMATION

Abbreviations:

TSCA	Toxic Substance Control Act
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous
OSHA	Occupational Safety and Health
IARC/NTP	International Agency for Research on Cancer/National Toxicology Program
SARA	Superfund Amendments and Reauthorization Act of 1986
ACGIH	American Conference of Governmental Industrial Hygienists
NIOSH/MSHA	National Institute for Occupational Safety Health/ Mine Safety and Health Administration
WHMIS	Workplace Hazardous Materials Information System

Prepared by: Milwaukee Electric Tool Corporation

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